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EXAMINER	
FOX, JAMAL A	
ART UNIT	**PAPER NUMBER**
2664	

DATE MAILED: 10/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/052,684	KANETAKE, TATSUO	
	Examiner	Art Unit	
	Jamal A. Fox	2664	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *18 January 2002*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-40* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-6,17-19,21-24 and 31-34* is/are rejected.

7)☒ Claim(s) *7-16,20-22,25-30 and 35-40* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *29 March 2002* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *1/18/02 & 10/16/02*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. New corrected drawings in compliance with 37 CFR 1.121(d) are required in this application because the text and reference characters in Figures 4-11 are illegible. Applicant is advised to employ the services of a competent patent draftsperson outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

Specification

2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

3. The abstract of the disclosure is objected to because it is not within the range of 50-150 words. Correction is required. See MPEP § 608.01(b).

Claim Objections

4. Claims 21 and 22 are objected to because of the following informalities: Claim 21 line 10, after "packet", claim 22 is present on the same line as claim 21. Appropriate correction is required.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

6. Claims 1-6, 17, 18, 19, 21-24 and 31-34 are rejected under 35 U.S.C. 102(e) as being anticipated by Madour et al. (U.S. Patent No. 6,611,532).

Referring to claim 1, Madour et al. discloses a system for managing multiple links in a links in a label switched network (MPLS, col. 2 line 64 – col. 3 line15 and col. 4 lines 18-30), comprising:

a plurality of virtual links (virtual link, col. 1 lines 32-35) including a plurality of input virtual links (virtual link, col. 1 lines 32-35) and a plurality of output virtual links (virtual link, col. 1 lines 32-35), each input or output virtual link (virtual link, col. 1 lines 32-35) having a plurality of individual links;

a plurality of ingress nodes (see Fig. 8, ref. sign SSP and STP and Fig. 13 ref. sign STP), each ingress node configured to receive packets and label the packets with associated labels;

a plurality of label switching nodes (see Fig. 8, ref. sign SSP and STP and Fig. 13 ref. sign STP), each label switching node configured to receive labeled packets having respective associated labels via one or more input virtual links (virtual link, col. 1 lines 32-35) and forward the received labeled packets based on their respective associated labels via one or more output virtual links (virtual link, col. 1 lines 32-35), each label switching node further including a control component (routing table, col. 4 lines 40-45) configured to maintain label information relating to the associated labels and a forwarding component (forwarding component, col. 4 lines 49-56) configured to perform forwarding of the received labeled packets based on the label information;

a plurality of egress nodes (see Fig. 8, ref. sign SSP and STP and Fig. 13 ref. sign STP), each egress node configured to receive the labeled packets forwarded from one of the plurality of label switching nodes;

wherein one or more label switching nodes (see Fig. 8, ref. sign SSP and STP and Fig. 13 ref. sign STP) are identified as belonging to a label switching path (label switched path, col. 5 lines 20-25 and col. 5 lines 53-62) and virtual links (virtual link, col.

1 lines 32-35) are used to interconnect the identified label switching nodes as belonging to the label switched path (label switched path, col. 5 lines 20-25 and col. 5 lines 53-62); and

wherein the plurality of individual links within each of the virtual links (virtual link, col. 1 lines 32-35) used to interconnect the identified label switching nodes are collectively regarded as a single entity by the control component (routing table, col. 4 lines 40-45) with respect to the label switched path (label switched path, col. 5 lines 20-25 and col. 5 lines 53-62).

Referring to claim 2, Madour et al. discloses the system of claim 1 wherein details with respect to which ones of the individual links within an output virtual link (virtual link, col. 1 lines 32-35) are to be used to forward the received packets are concealed from the control component (routing table, col. 4 lines 40-45).

Referring to claim 3, Madour et al. discloses the system of claim 1 wherein at least on of the labeled packets is capable of being forwarded (forward, col. 4 lines 40-45) to any one of the plurality of individual links within an output virtual link (virtual link, col. 1 lines 32-35) without changing its associated label that is established in an initial signaling process.

Referring to claim 4, Madour et al. discloses the system of claim 1 wherein the associated label (label, Fig. 4 and respective portions of the spec.) is composed of any one of the following entities or combination thereof including a single sequence of bits of fixed length, time slot position in a TDM frame and wavelength of optical carrier.

Referring to claim 5, Madour et al. discloses the system of claim 1 wherein each associated label belongs to one of a plurality of classes (FEC, col. 3 lines 10-40); and

wherein the associated labels are used by a label switching node to forward packets belonging to a corresponding class (FEC, col. 3 lines 10-40) onto one of the plurality of individual links of an output virtual link.

Referring to claim 6, Madour et al. discloses the system of claim 5 wherein the label switched network is a multiple protocol label switched network (MPLS, col. 2 line 64 – col. 3 line15 and col. 4 lines 18-30) and the corresponding class is a forwarding equivalence class (FEC, col. 3 lines 10-40).

Referring to claim 17, Madour et al. discloses a system for setting label switched paths in a label switched network (MPLS, col. 2 line 64 – col. 3 line15 and col. 4 lines 18-30), comprising:

a plurality of links (see links, Fig. 8 and Fig. 13); and

a plurality of nodes (see Fig. 8, ref. sign SSP and STP and Fig. 13 ref. sign STP) interconnected to each other via the plurality of links;

wherein a label switched path (LSP, col. 5 lines 19-25 and col. 5 lines 53-62) is identified for transmitting packets through the label switched network (MPLS, col. 2 line 64 – col. 3 line15 and col. 4 lines 18-30) and is made up of one or more links interconnecting one or more nodes;

wherein the one or more links within the label switched path (LSP, col. 5 lines 19-25 and col. 5 lines 53-62) include one or more virtual links (virtual link, col. 1 lines 32-40); and

wherein each of the one or more virtual links (virtual link, col. 1 lines 32-40) is made up of one or more physical (physical, col. 1 lines 32-40) links.

Referring to claim 18, Madour et al. discloses the system of claim 17 wherein each node in the label switched path (label switched path, col. 5 lines 20-25 and col. 5 lines 53-62) is configured to receive packets having respective labels via one or more links connected thereto and forward the received packets based on their respective labels via one or more links connected thereto;

wherein each node in the label switched path (label switched path, col. 5 lines 20-25 and col. 5 lines 53-62) includes a control component (routing table, col. 4 lines 40-45) configured to maintain label information relating to the labels and forwarding component (forwarding table, col. 4 lines 31-40 and col. 5 lines 1-11) configured to perform forwarding of the received packets based on the label information; and

wherein for a node in the label switched path (label switched path, col. 5 lines 20-25 and col. 5 lines 53-62), if the link to be used to forward a received packet is a virtual link (virtual link, col. 1 lines 32-35), the received packet is capable of being forwarded to any one of the one or more physical (physical, col. 1 lines 32-40) links within the virtual link (virtual link, col. 1 lines 32-35) without changing its label that is established in an initial signaling process.

Referring to claim 19, Madour et al. discloses the system of claim 17 wherein the label (label, Fig. 4 and respective portions of the spec.) associated with a packet is composed of any one of the following entities or combination thereof including a single

sequence of bits of fixed length, time slot position in a TDM frame and wavelength of optical carrier.

Referring to claim 21, Madour et al. discloses the system of claim 18, wherein the node in the label switched path (label switched path, col. 5 lines 20-25 and col. 5 lines 53-62) further comprises:

a plurality of label forwarding tables (forwarding table, col. 4 lines 31-40), each label forwarding table having a plurality of entries, each entry including an input virtual port number (VPI, VCI, col. 4 lines 50-55), an input label (MPLS label, col. 4 lines 55-60), an output label (MPLS label, col. 4 lines 55-60) and an output virtual port number (VPI, VCI, col. 4 lines 50-55); and

wherein the input virtual port number (VPI, VCI, col. 4 lines 50-55) represents identification information relating to a virtual link used to receive the packets, the input label (MPLS label, col. 4 lines 55-60) represents label information relating to a received packet, the output label (MPLS label, col. 4 lines 55-60) represents label information relating to the received packet to be forwarded and the output virtual port number (VPI, VCI, col. 4 lines 50-55) represents identification information relating to a virtual link (virtual link, col. 1 lines 32-35) used to forward the received packet.

Referring to claim 22, Madour et al. discloses a label switching router (LSR, col. 5 lines 25-30 and col. 5 lines 55-60 and col. 6 lines 9-16) for use in a multiple protocol label switched network (MPLS, col. 2 line 64 – col. 3 line15 and col. 4 lines 18-30), comprising:

a plurality of virtual links (virtual link, col. 1 lines 32-35) including a plurality of input virtual links (virtual link, col. 1 lines 32-35) and a plurality of output virtual links (virtual link, col. 1 lines 32-35), each input or output virtual link (virtual link, col. 1 lines 32-35) having a plurality of individual links;

a control component (routing table, col. 4 lines 40-45) configured to maintain label information relating to labels carried by packets received via one or more of the input virtual links (virtual link, col. 1 lines 32-35);

a forwarding component (forwarding component, col. 4 lines 49-56) configured to perform forwarding of the received packets based on the label information via one or more of the plurality of output virtual links;

at least one label forwarding table (forwarding table, col. 4 lines 31-40 and col. 5 lines 1-11) for storing the label information, the at least one label forwarding table having a plurality of entries, each entry having an input virtual port number (VPI, VCI, col. 4 lines 50-55), an input label (MPLS label, col. 4 lines 55-60), an output label (MPLS label, col. 4 lines 55-60) and an output virtual port number (VPI, VCI, col. 4 lines 50-55);

wherein the label switching router (LSR, col. 5 lines 25-30 and col. 5 lines 55-60 and col. 6 lines 9-16) is identified as a part of a label switched path (label switched path, col. 5 lines 20-25 and col. 5 lines 53-62) for routing packets; and

wherein the respect to the label switched path (label switched path, col. 5 lines 20-25 and col. 5 lines 53-62), the control component (routing table, col. 4 lines 40-45) is capable of treating either the plurality of individual links within each input virtual link

(virtual link, col. 1 lines 32-35) or the plurality of individual links within each output virtual link (virtual link, col. 1 lines 32-35) or both as a single entity.

Referring to claim 23, Madour et al. discloses the label switching router of claim 22, wherein the control component (routing table, col. 4 lines 40-45) is not concerned with details with respect to which ones of the individual links within the output virtual link (virtual link, col. 1 lines 32-35) are to be used to forward the received packets.

Referring to claim 24, Madour et al. discloses the label switching router (LSR, col. 5 lines 25-30 and col. 5 lines 55-60 and col. 6 lines 9-16) of claim 22, wherein at least one of the packets is capable of being forwarded (forward, col. 4 lines 40-45) to any one of the plurality of individual links within an output virtual link without changing its associated label that is established in an initial signaling process.

Referring to claim 31, Madour et al. discloses a method for managing virtual links (virtual link, col. 1 lines 32-35) in a label switched network (MPLS, col. 4 lines 18-60), comprising:

grouping (substituting, col. 4 lines 50-56) a plurality of individual links into a plurality of virtual links, each virtual link having one or more individual links, and the plurality of virtual links including a plurality of input virtual links and a plurality of output virtual links (VPI, VCI, col. 4 lines 50-55);

maintaining a plurality of ingress routers (See Fig. 13 and respective portions of the spec.), wherein each ingress router is configured to receive packets and label the packets with associated labels; maintaining a plurality of label switching routers (LSR, col. 4 lines 30-48) within the label switched network (MPLS, col. 2 line 64 – col. 3 line15

and col. 4 lines 18-30), wherein each label switching router is configured to receive the labeled packets having respective labels from one of the plurality of ingress routers (See Fig. 13 and respective portions of the spec.) via one or more input virtual links (virtual link, col. 1 lines 32-35) and forward the received labeled packets via one or more virtual links (virtual link, col. 1 lines 32-35), each label switching router further includes a control component (routing table, col. 4 lines 40-45) configured to maintain label information relating to the labels and a forwarding component (forwarding component, col. 4 lines 49-56) configured to perform forwarding of the received labeled packets based on the label information;

maintaining a plurality of egress routers (See Fig. 13 and respective portions of the spec.), wherein each egress router is configured to receive the labeled packets forwarded by one of the plurality of label switching routers;

establishing a label switched path (label switched path, col. 5 lines 20-25 and col. 5 lines 53-62) having one or more label switching routers (LSR, col. 5 lines 25-30 and col. 5 lines 55-60 and col. 6 lines 9-16) for routing the labeled packets, wherein one or more virtual links are used to interconnect the label switching routers (LSR, col. 5 lines 25-30 and col. 5 lines 55-60 and col. 6 lines 9-16) along the label switched path (label switched path, col. 5 lines 20-25 and col. 5 lines 53-62) and the label switching routers along the label switched path (label switched path, col. 5 lines 20-25 and col. 5 lines 53-62) communicate with one another via their respective control components to exchange label information to establish the label switched path (label switched path, col. 5 lines 20-25 and col. 5 lines 53-62); and

treating the one or more individual links within each of the one or more virtual links (virtual link, col. 1 lines 32-35) being used to interconnect the label switching routers (LSR, col. 5 lines 25-30 and col. 5 lines 55-60 and col. 6 lines 9-16) along the label switched path (label switched path, col. 5 lines 20-25 and col. 5 lines 53-62) collectively as a single entity with respect to the label switched path (label switched path, col. 5 lines 20-25 and col. 5 lines 53-62), wherein the exchanged label information does not include details relating to which ones of the individual links within a virtual link (virtual link, col. 1 lines 32-35) are to be used to forward packets.

Referring to claim 32, Madour et al. discloses the method of claim 30 further comprising:

maintaining a label forwarding table (forwarding table, col. 4 lines 31-40 and col. 5 lines 1-11) at each label switching router;

wherein the label forwarding table includes a plurality of entries, each entry including an input virtual port number and input label and an output virtual port number (VPI, label field and VCI, col. 4 lines 50-60).

Referring to claim 33, Madour et al. discloses the method of claim 31 wherein a plurality of labels uniquely correspond to a plurality of classes (FEC, col. 3 lines 10-40). Referring to claim 34, Madour et al. discloses the method of claim 32 wherein the label switched network is a multiple protocol label switched network and the plurality of class is a plurality of forwarding equivalence classes (FEC, col. 3 lines 10-40).

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claim 17 is rejected under 35 U.S.C. 102(e) as being anticipated by Nishihara (U.S. Patent Application Publication No. 2002/0018468).

Referring to claim 17, Nishihara discloses a system for setting label switched paths in a label switched network (MPLS, [0034]), comprising:

a plurality of links (Fig. 1, ref. sign OCH and respective portions of the spec.); and

a plurality of nodes (Fig. 1 ref. signs 55, 56, 57, and 58) interconnected to each other via the plurality of links;

wherein a label switched path (see Fig. 16 and path, [0034]) is identified for transmitting packets through the label switched network (MPLS, [0034]) and is made up of one or more links interconnecting one or more nodes;

wherein the one or more links within the label switched path include one or more virtual links (virtual link, [0034]); and

wherein each of the one or more virtual links (virtual link, [0034]) is made up of one or more physical (physical, [0019]) links.

9. Claim 17 is rejected under 35 U.S.C. 102(e) as being anticipated by Saunders et al. (U.S. Patent Application Publication No. 2002/0097463).

Referring to claim 17, Saunders et al. discloses a system for setting label switched paths (LSP, [0060]) in a label switched network (MPLS, [0060]), comprising:

a plurality of links (Fig. 1 ref. signs 15 and respective portions of the spec.) ; and

a plurality of nodes (Fig. 1 ref. signs 1, 2, 3 and 4 and respective portions of the spec.) interconnected to each other via the plurality of links;

wherein a label switched path (LSP, [0060]) is identified for transmitting packets through the label switched network and is made up of one or more links interconnecting one or more nodes;

wherein the one or more links within the label switched path include one or more virtual links (Fig. 1 ref. sign 17 and virtual link, [0046]); and

wherein each of the one or more virtual links (Fig. 1 ref. sign 17 and virtual link, [0046]) is made up of one or more physical links (physical, [0046]).

10. Claim 31 is rejected under 35 U.S.C. 102(e) as being anticipated by Oguchi et al. (U.S. Patent Application Publication No. 2002/0067725).

Referring to claim 30, Oguchi et al. discloses a method for managing virtual links (virtual link, [0063], [0079]) in a label switched network (MPLS, [0084]), comprising:

grouping a plurality of individual links into a plurality of virtual links (virtual link, [0063], [0079]), each virtual link (virtual link, [0063], [0079] and [0094]) having one or more individual links, and the plurality of virtual links (virtual link, [0063], [0079] and [0094]) including a plurality of input virtual links (virtual link, [0063], [0079]) and a plurality of output virtual links (virtual link, [0063], [0079]);

maintaining a plurality of ingress routers (see Fig. 1 and respective portions of the spec.), wherein each ingress router is configured to receive packets and label the packets with associated labels; maintaining a plurality of label switching routers (see Fig. 1 and respective portions of the spec.) within the label switched network (MPLS, [0084]), wherein each label switching router (LSR, [0055]) is configured to receive the labeled packets having respective labels from one of the plurality of ingress routers (see Fig. 1 and respective portions of the spec.) via one or more input virtual links (virtual link, [0063], [0079] and [0094]) and forward the received labeled packets via one or more virtual links (virtual link, [0063], [0079] and [0094]), each label switching router further includes a control component (routing table, [0040], [0043], [0049], [0052], [0062], [0067], [0068], [0071], [0111], [0112], [0187], [0189], [0190], [0192], [0193], [0207] and [0212]) configured to maintain label information relating to the labels and a forwarding component (forwarding function, [0045] and [0062]) configured to perform forwarding (forward, [0055]) of the received labeled packets based on the label information;

maintaining a plurality of egress routers (see Fig. 1 and respective portions of the spec.), wherein each egress router is configured to receive the labeled packets forwarded by one of the plurality of label switching routers (label switching router, [0055]);

establishing a label switched path (Label Switching Path, [0084]) having one or more label switching routers (label switching router, [0055]) for routing the labeled packets, wherein one or more virtual links (virtual link, [0063], [0079] and [0094]) are

used to interconnect the label switching routers (label switching router, [0055]) along the label switched path (Label Switching Path, [0084]) and the label switching routers (label switching router, [0055]) along the label switched path communicate with one another via their respective control components to exchange label information to establish the label switched path (Label Switching Path, [0084]); and

treating the one or more individual links within each of the one or more virtual links (virtual link, [0063], [0079] and [0094]) being used to interconnect the label switching routers (label switching router, [0055]) along the label switched path (Label Switching Path, [0084]) collectively as a single entity with respect to the label switched path (Label Switching Path, [0084]), wherein the exchanged label information does not include details relating to which ones of the individual links within a virtual link (virtual link, [0063], [0079] and [0094]) are to be used to forward packets.

Allowable Subject Matter

11. Claims 7-16, 20, 25-30 and 35-40 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

12. **Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(571) 273-8300, (for formal communications intended for entry)

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jamal A. Fox whose telephone number is (571) 272-3143. The examiner can normally be reached on Monday-Friday 6:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin can be reached on (571) 272-3134. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to 2600 Customer Service whose telephone number is (571) 272-2600.

Jamal A. Fox

Jamal A. Fox

WELLINGTON CHIN
SUPERVISORY PATENT EXAMINER